Hot Issue Paper for Regional/Deputy Regional Administrator

(WV Freedom Spill - Residuals)

Date of Briefing: 3/6/14 Staff Contact/Phone #: Bill Arguto x3367

Issue/Topic:

- On February 18, 2014, the American Water Co officially requested that EPA review a draft briefing paper (Briefing Document on Evaluation of Chemical interactions with Pipes) that the Company prepared which summarizes their approach to clear the water system (distribution and premise piping) of MCHM contamination.
- Region 3 requested a technical review of the document from National Homeland Security Research Center- ORD, the Water Security Division-OW. This team represents EPA experts who have researched fate and transport of chemical contamination of public water systems.
- The EPA draft technical review of the American Water briefing paper was received in the Region on 2/27/14.
- WPD is continuing the coordination of the EPA response. Our EPA response will provide the Agency assessment of the potential for residuals to remain in the distribution system and premise piping.

Background:

- The WV Freedom Chemical spill impacted the Charleston WV water supply that is serviced by the West Virginia American Water Company.
- Their impacted Elk River intake supplies water to 9 counties and a population of 300,000.
- A "do not use" order was issued to the affected population on Jan 9, 2014. Due to the impact of this spill the Governor also declared a State of Emergency.
- Of the many initial responses to the contaminated water supply the water company began an aggressive flushing program through their distribution system to remove the chemical MCHM, (Freedom Chemical later disclosed that PPH and DiPPH were mixed in the MCHM that leaked.)
- The distribution system contains 1,900 miles of pipe, 100 storage tanks and 179 pressure zones. Also impacted is premise piping of approx 100,000 connections including schools, hospitals, businesses and private residences..
- The flushing was effective over time of reaching an initial non detectable level of 10 ppb for MCHM and eventually 2 ppb. The "do not use "order was lifted on Jan 19, 2014
- A remaining question is if there are any residual concentrations that were left in the distribution system and more importantly in house hold premise piping.
- House hold premise piping was also recommended to be flushed with instructions provided by the Water Company.
- The State has contracted for independent sampling to test premise piping in individual homes. Results of this sampling have not been issued.

Direction/Decision:

The Region will provide comments on the American Water briefing document that describes the Company's approach in response to the spill, specifically, the decision to aggressively flush with the expectation that residuals would not remain.

Next Steps:

Obtain Agency concurrence of our EPA review of the American Water briefing document. Communicate our review to American Water and WVDHHR.